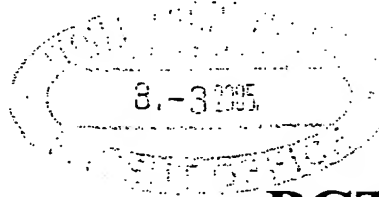


# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:  
ITO, Tadahiko

32nd Floor, Yebisu Garden Place  
Tower, 20-3, Ebisu  
4-chome, Shibuya-ku, Tokyo  
1506032 Japan



**PCT**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) **02.8.2005**

Applicant's or agent's file reference  
**R05060PCT**

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
**PCT/JP2005/012273**

International filing date (day/month/year)  
**28.06.2005**

Priority date (day/month/year)  
**29.06.2004**

International Patent Classification (IPC) or both national classification and IPC  
**Int.Cl.<sup>7</sup> B41J2/165, 2/18, 2/185**

Applicant  
**RICOH COMPANY, LTD.**

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Date of completion of this opinion		15.07.2005	
<b>Japan Patent Office</b> 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan		Authorized officer <b>Kirihata Yukihiro</b>	
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2P 9606

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2005/012273

**Box No. I      Basis of the opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐ a sequence listing

☐ table(s) related to the sequence listing

b. format of material

☐ in written format

☐ in computer readable form

c. time of filing/furnishing

☐ contained in the international application as filed.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2005/012273

**Box No. V**      **Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	1-10	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-10	NO
Industrial applicability (IA)	Claims	1-10	YES
	Claims		NO

**2. Citations and explanations**

D1: JP 2001-71514 A(SEIKO EPSON CORPORATION)  
21.03.2001, see whole document  
& EP 1083052 A2 & US 6481826 B1

D2: JP 2003-276213 A(SEIKO EPSON CORPORATION)  
30.09.2003, column 9 lines 21-30  
& US 2003/0234829 A1

D3: JP 2003-96355 A(RICOH COMPANY, LTD.)  
03.04.2003, column 1 lines 2-15  
& EP 1262529 A1 & US 2003/0107632 A1

**Claims 1,6**

Document D1 discloses a cap member consisting of a resilient contact member and a recess-forming member. The recess-forming member, which is made of a rubber material containing a water repellent agent, has at least two slopes as the recess.

Document D2 discloses a cap member consisting of a resilient contact member and a recess-forming member made by double-molding. A person skilled in the art can conceive easily to apply this double-molding method to the cap member disclosed in document D1.

**Claims 2,8**

The ratio of said water repellent agent in the recess-forming member is selectable. A person skilled in the art can conceive easily to adopt an adequate ratio according to desirable water repellence.

**Claims 3,9**

Document D1 discloses curved corners of the recess of the recess-forming member. (See Fig.5)

**Claims 4,5,10**

A sum of the inclination angle and a contact angle of said slopes is larger than 90 degrees because the water repellence of recess-forming member means the contact angle with respect to water is larger than 90 degrees.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/012273

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box No.V

Claim 7

Document D3 discloses a pigment ink which is same as the ink described in Claim 7.